PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech.Winter2019 - 20Examination

Semester: 3   **Date: 02/12/2019**
Subject Code: 03105204   **Time: 2:00pm to 4:30pm**
Subject Name: Object Oriented Programming with C++   **Total Marks: 60**

Instructions:
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Objective Type Questions - (Each of one mark)   **(15)**
1. Which of the following statement is correct?
   a) C++ allows static type checking.
   b) C++ allows dynamic type checking.
   c) C++ allows static member function be of type const.
   d) Both A and B.
2. Which of the following is not a type of constructor?
   a) Copy constructor
   b) Friend constructor
   c) Default constructor
   d) Parameterized constructor
3. The OOPs concept in C++, exposing only necessary information to users or clients is known as
   a) Abstraction
   b) Encapsulation
   c) Data hiding
   d) Hiding complexity
4. Which of the following is not the member of class?
   a) Static function
   b) Friend function
   c) Const function
   d) Virtual function
5. Which of the following is the correct class of the object cout?
   a) iostream
   b) istream
   c) ostream
   d) ifstream
6. Define object.
7. What is an array?
8. The pointer is accessible_____.
9. _____ function underlines the feature of Polymorphism in a class.
10. Class is pass by _____.
11. Default constructor must be defined, if parameterized constructor is defined and the object is to be created without arguments. (True/False)
12. Which access specifier is/are most secure during inheritance?
13. What is new operator?
14. Class with main() function can be inherited (True/False)
15. Which feature can be implemented using encapsulation?

Q.2 Answer the following questions. (Attempt any three) **(15)**

    A) Explain Virtual base class with diagram.

    B) What is inline function? What are the advantages of making inline function?

    C) Write a C++ program to find out sum and average using Class.

    D) What is the use of destructor in C++? Explain with suitable example.

Q.3 A) Define Polymorphism? Explain function overloading with suitable example. **(07)**

    B) Write a program for swapping two different values with and without third variable. **(08)**

<div align="center">OR</div>

    B) Demonstrate the use of static variable with a program. **(08)**

Q.4 A) Differentiate Object Oriented Programming (OOP) and Procedure Oriented Programming (POP). **(07)**

<div align="center">OR</div>

    A) What is Call by value and call by reference? Explain with suitable example. **(07)**

    B) Write a program to copy the contents of a file A.txt into another file B.txt. **(08)**